CLAIMS

- 1 1. A method for testing a unit comprising:
- 2 receiving at least one compressed test vector by the unit;
- decompressing at least one compressed test vector; and
- 4 generating at least one output from the unit based at least in part on the testing of the unit
- 5 with the decompressed test vector.
 - The method of claim 1 further comprising:
 compressing at least one output by the unit; and
 - forwarding the compressed output to a test platform.
 - 3. The method of claim 1 wherein decompressing at least one compressed test vector comprises bypassing the decompression if the test vector does not efficiently compress.
 - 4. The method of claim 2 wherein compressing at least one output comprises bypassing the
- 2 compression if the output does not efficiently compress.
- 1 5. The method of claim 1 wherein the test vector is either one of a functional vectors,
- 2 parametric vectors, automatic pattern generation (ATPG) vectors, initialization vectors, and reset
- 3 vectors.



- 1 6. The method of claim 1 wherein receiving at least one compressed test vector comprises
- 2 loading the compressed test vector with either a single pin of the unit in a serial manner or a
- 3 plurality of pins in a parallel manner.
- 7. The method of claim 1 wherein the unit is either one of a system on a chip (SoC), an
- 2 integrated device, or a chipset.
- 8. The method of claim 1 wherein the test platform is either one of a workstation, automatic test equipment, network analyzer, and a logic analyzer.
 - 9. A system comprising:
 - a vector generation logic to generate a plurality of test vectors; and
 - a device under test, coupled to the vector generation logic, the system
 - to compress at least one of the plurality of test vectors and to decompress the
 - compressed test vectors when applied to the device under test, and to compress at
 - least one of the plurality of outputs generated by the device under test in response
- 7 to the decompressed test vector or vectors.
- 1 10. The system of claim 9 further comprising an analysis logic to receive the decompressed
- 2 plurality of output or outputs.

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- 1 11. The system of claim 9 wherein the plurality of test vectors is either one of a functional
- 2 vectors, parametric vectors, automatic pattern generation (ATPG) vectors, initialization vectors,
- 3 and reset vectors
- 1 12. The system of claim 9 wherein the device under test is either one of a system on a chip
- 2 (SoC), an integrated device, or a chipset.
- 1 13. The system of claim 9 wherein the vector generation logic is either one of a workstation,

 automatic test equipment, network analyzer, and a logic analyzer.
 - 14. The system of claim 10 wherein the analysis logic is either one of a workstation, automatic test equipment, network analyzer, oscilloscope, and a logic analyzer.
 - 15. An apparatus comprising:
 - an input port to receive at least one compressed test vector;
 - a decompression logic to decompress the compressed test vector; and
 - the apparatus to generate at least one output based at least in part on the decompressed
 - 5 test vector

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- 1 16. The apparatus of claim 15 wherein the input port is a single pin or a plurality of pins that
- 2 receive the test vector(s).
- 1 17. The apparatus of claim 15 wherein the decompression logic supports a delta method
- 2 decompression protocol.

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- 1 18. The apparatus of claim 15 wherein the apparatus is either one of a system on a chip
- 2 (SoC), an integrated device, or a chipset.
- 1 19. The apparatus of claim 15 wherein test vector(s) is either one of a functional vectors,
- 2 parametric vectors, automatic pattern generation (ATPG) vectors, initialization vectors, and reset
- 3 vectors.
- 1 20. The apparatus of claim 15 wherein the apparatus comprises a compression logic to compress the output(s).

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